

Mineral Industry Surveys

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LEAD IN APRIL 2006

Domestic mine production of lead, based on the net quantity of lead recovered from concentrate, was 33,700 metric tons (t) in April, according to the U.S. Geological Survey. This represented a decrease of about 12% compared with production in March 2006 and a decrease of about 4% compared with that in April 2005. Mine production for the first 4 months of 2006 was about 7% greater than that of January through April of 2005. Secondary refinery production of lead was 98,300 t in April, an increase of approximately 1% from that of March.

According to Platts Metals Week published quotations, the average North American producer price declined nominally from that of the previous month to 76.46 cents per pound. The London Metal Exchange Ltd. (LME) cash price in April ranged from a low of \$1,148.50 per metric ton (April 13) to a high of \$1,209.00 per metric ton (April 3), and averaged \$1,169.88 per metric ton, about a 2% decrease compared with the March 2006 average price. These prices (North American producer and LME) were up by about 26% and 19%, respectively, compared with the April 2005 average prices. During April, global LME lead stocks increased by 9,850 t to 99,600 t at month's end. On May 8, LME lead stocks rose above 100,000 t for the first time since January 14, 2004.

Chinese production of lead metal (both primary and secondary) for the first quarter of 2006 was 632,000 t, approximately a 38% increase compared with production in the first quarter of 2005. Lead contained in concentrates (mine) production was up about 17% to 132,000 t (Antaike, 2006).

Also in China, the Jiyuan Gold Smelter in Henan Province added an extra furnace at the end of 2005 to boost capacity and planned production to 270,000 t of refined lead in 2006, up 17% from production in 2005 (CRU International Ltd., 2006).

The U.S. Environmental Protection Agency (EPA) ordered Missouri to develop a new State Implementation Plan for attaining and maintaining National Ambient Air Quality Standards in the area of Doe Run Resource Company's Herculaneum, MO, primary lead smelter. Missouri has 1 year to correct deficiencies in its plan and then Doe Run will have an additional year to meet the new standards (U.S. Environmental Protection Agency, 2006).

The National Defense Stockpile aggregated cash disposal (sale) of lead in April, under the Basic Ordering Agreement DLA-Lead-005, was 2,400 t, with an approximate value of \$2.9 million (Defense National Stockpile Center, 2006).

References Cited

Antaike, 2006, Statistics for March—Chinese output of lead, zinc and tin in Mar. 2006: Antaike, China Metal Market – Lead & Zinc, Tin Monthly, no. 110, January, p. 6.

CRU International Ltd., 2006, CRU Monitor—Lead—Supply briefing—Smelter news: CRU International Ltd., May, 7 p.

Defense National Stockpile Center, 2006, Stockpile announces lead BOA sales for April 2006: Fort Belvoir, VA, Defense National Stockpile Center news release, May 5, 1 p.

U.S. Environmental Protection Agency, 2006, Finding of substantial inadequacy of implementation plan—Call for Missouri State Implementation Plan revision: Federal Register, v. 71, no. 72, April 14, p. 19432-19435.

 $\label{eq:table 1} \textbf{TABLE 1}$ SALIENT LEAD STATISTICS IN THE UNITED STATES 1

(Metric tons, lead content, unless otherwise specified)

	2005		2006			
		January -			January -	
	Year	April	March	April	April	
Production:						
Mine (recoverable)	426,000	132,000	38,100	33,700	142,000	
Secondary refinery:						
Reported by smelters/refineries	1,110,000 ^p	370,000 ^r	95,200 ^r	96,100	376,000	
Estimated	11,200 ^p	3,740 ^r	961 ^r	970	3,800	
Recovered from copper-base scrap ^e	15,000 ^p	5,000	1,250	1,250	5,000	
Total secondary	1,140,000 ^p	379,000 ^r	97,400 ^r	98,300	385,000	
Stocks, end of period:	_					
Secondary smelters and consumers	61,400 ^p	63,900	59,800 ^r	60,500	60,500	
Imports for consumption:	_					
Ore and concentrate		6		NA	2	
Refined metal	298,000	90,600 ^r	24,800	NA	87,900 ²	
Consumption:						
Reported	1,460,000 ^p	488,000 ^r	125,000 ^r	124,000	497,000	
Undistributed ^e	45,300 ^p	15,100 ^r	3,880 ^r	3,830	15,400	
Total	1,510,000 ^p	503,000 ^r	129,000 ^r	128,000	512,000	
Exports:						
Ore and concentrate	390,000	47,500	6,570	NA	39,500 ²	
Bullion	198	69	29	NA	68 ²	
Wrought and unwrought lead	64,600	22,700	8,630	NA	18,500 ²	
TEL/TML preparations, based on lead compounds	1,270	668	909	NA	970 ²	
Exports (gross weight): Scrap	67,300	21,700	6,070	NA	$20,900^{-2}$	
Platts Metals Week North American producer						
price (cents per pound)	61.03	60.74	76.54	76.46	69.98	

^eEstimated. ^pPreliminary. ^rRevised. NA Not available. -- Zero.

TABLE 2 MONTHLY AVERAGE LEAD PRICES

	North American producer price	LN	LME		
	cents/lb	\$/metric ton	£/metric ton	dollars/£	
2005:					
April	60.76	985.33	519.66	1.896105	
December	64.78	1,123.51	643.55	1.745805	
Year	61.03	975.98	537.10	1.817133	
2006:					
February	76.86	1,276.20	730.09	1.747995	
March	76.54	1,191.74	683.26	1.744187	
April	76.46	1,169.88	661.68	1.768045	

Source: Platts Metals Week.

¹Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

²Includes data for March only; April data were not available at time of publication.

 $\label{eq:table 3} \textbf{CONSUMPTION OF PURCHASED LEAD-BASE SCRAP}^1$

(Metric tons, gross weight)

	Stocks			Stocks
	March 31,	Net		April 30,
Item	2006	receipts	Consumption	2006
Battery-lead	24,100	100,000	99,900	24,300
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other ²	3,530	3,970	4,260	3,240
Total	27,600	104,000	104,000	27,500
Percent change from preceding month	XX	-2.4	-2.0	-0.2

W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

 $\label{eq:table 4} \textbf{LEAD, TIN, AND ANTIMONY RECOVERED FROM} \\ \textbf{LEAD-BASE SCRAP IN APRIL 2006}^1$

(Metric tons)

	Secondary metal content					
Product recovered	Lead	Tin	Antimony			
Soft and calcium lead	74,700					
Remelt lead	W					
Antimonial lead	20,900	(2)	(2)			
Other ³	494	(2)	(2)			
Total lead-base	96,100	137	239			

W Withheld to avoid disclosing company proprietary data; included in "Other." -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

¹Data are rounded to no more than three significant digits.

²Withheld to avoid disclosing company proprietary data; included in "Total."

³Includes cable lead, lead-base babbitt, solder, type metals, and other products.

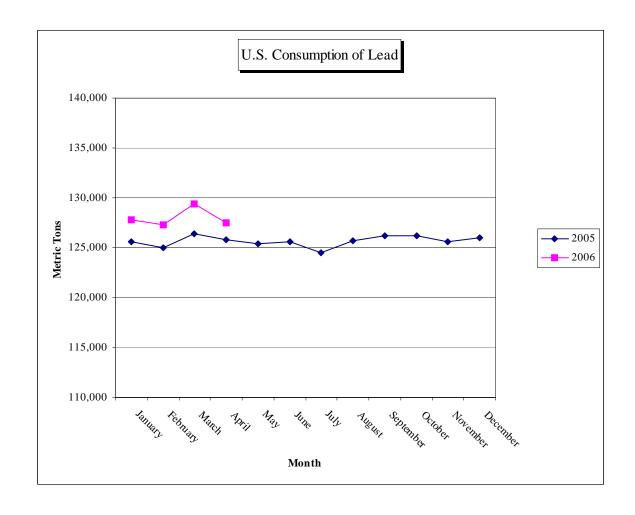
 ${\bf TABLE~5}$ CONSUMPTION OF LEAD IN THE UNITED STATES 1

(Metric tons, lead content)

	20	05		2006		
	January -	January -			January -	
Use	December ^p	April ^r	March	April	April	
Metal products:						
Ammunition, shot and bullets	60,000	20,000	6,950	6,260	25,700	
Brass and bronze, billet and ingots	3,700	1,230	399	374	1,540	
Cable covering, power and communication						
and calking lead, building construction	6,840	2,280	957	717	2,820	
Casting metals	17,900	5,980	1,520	1,530	6,090	
Sheet lead, pipes, traps and other extruded products	32,700	10,900	2,720	2,510	10,300	
Solder	7,130	2,380	474	474	1,980	
Storage batteries, including oxides	1,280,000	426,000	109,000 ^r	108,000	434,000	
Terne metal, type metal, and other metal products ²	2,210	736	154	145	594	
Total metal products	1,410,000	469,000	122,000 ^r	120,000	483,000	
Other oxides and miscellaneous	56,400	18,800	3,290	3,330	13,200	
Total reported	1,460,000	488,000	125,000 ^r	124,000	497,000	
Undistributed ^e	45,300	15,100	3,880 ^r	3,830	15,400	
Grand total	1,510,000	503,000	129,000 ^r	128,000	512,000	

 $^{^{}e}$ Estimated. p Preliminary. r Revised.

²Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.



¹Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 6 CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD $^{\rm l}$

(Metric tons, lead content)

	Stocks			Stocks
	March 31,	Net		April 30,
Type of material	2006	receipts	Consumption	2006
Soft lead	32,300	73,100	71,700	33,600
Antimonial lead	11,500 ^r	27,500	28,200	10,800
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	59,800 r	127,000	126,000	60,500

^rRevised. W Withheld to avoid disclosing company proprietary data; included in "Total."

 $\label{eq:table 7} \text{U.S. EXPORTS OF LEAD, BY CLASS}^1$

(Metric tons)

				2006			
	2005				January -		
	March	Year	February	March	March		
Lead content:							
Ore and concentrates	12,800	390,000	13,000	6,570	39,500		
Bullion	23	198	15	29	68		
Materials excluding scrap	6,260	64,600	4,710	8,630	18,500		
TEL/TML preparations, based							
on lead compounds	384	1,270	16	909	970		
Total	19,500	456,000	17,700	16,100	59,000		
Gross weight: Scrap	5,300	67,300	6,630	6,070	20,900		

Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

 ${\bf TABLE~8}$ U.S. IMPORTS OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN 1

(Metric tons, lead content)

	General imports					Imports for consumption					
	2005			2006		2005		2006			
	•	January -			January -		January -			January -	
Country of origin	Year	March	February	March	March	Year	March	February	March	March	
Base bullion:											
Canada	18					18					
Mexico											
Other	10	6				10	6				
Total	29	6				29	6				
Pigs and bars:											
Australia	19,300			252	478	39,600			252	478	
Canada	190,000	50,700	23,500	19,300	64,300	190,000	50,700	23,500	19,300	64,300	
Mexico	15,200	854	1,170	883	2,800	15,200	854	1,170	883	2,800	
Peru	23,900	3,100	1,840	3,980	9,410	23,900	3,100	1,840	3,980	9,410	
Other	28,300	83	5,780	438	10,900	29,000	83	5,780	438	10,900	
Total	277,000	54,700	32,300	24,800	87,900	298,000	54,700	32,300	24,800	87,900	
Grand total	277,000	54,700	32,300	24,800	87,900	298,000	54,700	32,300	24,800	87,900	

⁻⁻ Zero.

Source: U.S. Census Bureau.

 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.